



# Sigma

White Edition

Built in Wifi - 3 in 1 Filter  
Inverter Midwall Split Airconditioner



[www.sirair.co.za](http://www.sirair.co.za)

# WIFI CONTROL

Sirair smart air conditioners can be controlled or scheduled from your phone, no matter where you are. They are also compatible with Amazon Echo, Google Home smart-home systems, and Smart TVs, allowing you to control your AC using voice commands, which enhances convenience and makes your life smarter.



## TECHNOLOGY



### Control Your AC From Anywhere

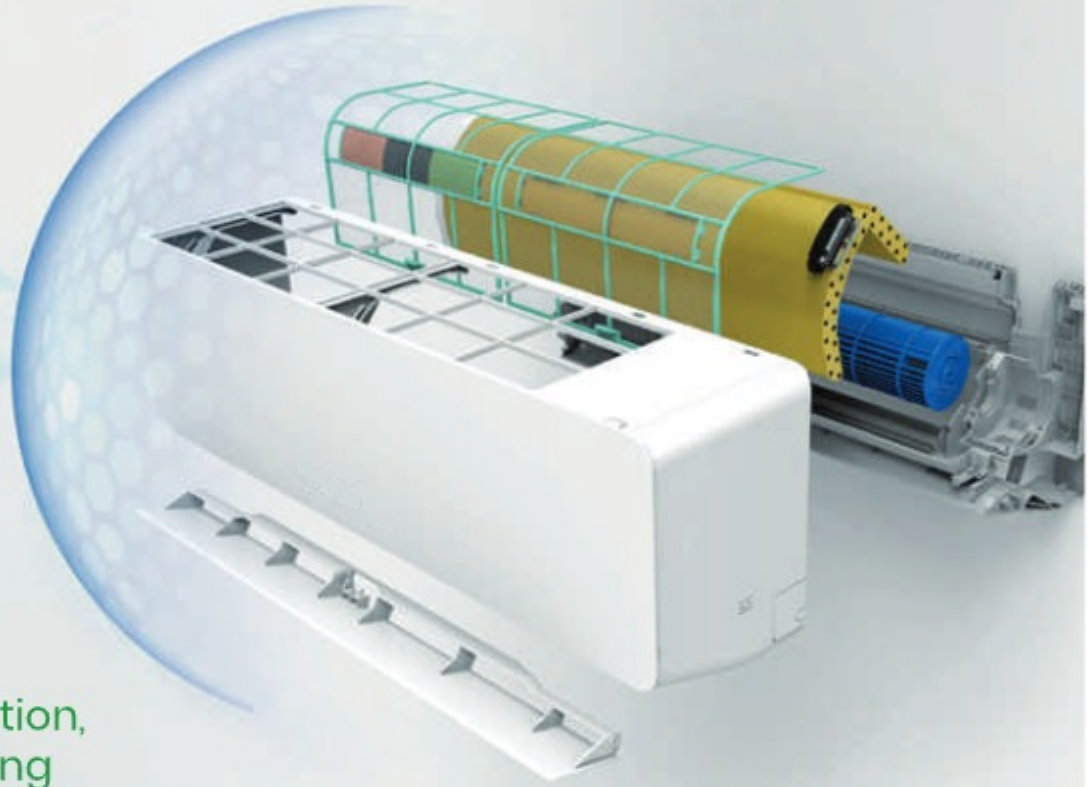
Sirair's smart air conditioning system is a cloud service designed to serve customers worldwide. Through this cloud service, users can easily control their home cooling systems with a single click, enabling them to enjoy the benefits of a more intelligent lifestyle. The intelligent cloud service strategically places server groups in multiple regions across the globe, automatically matching users with servers in their respective areas. With the support of global DNS and CDN accelerators, users can experience fast cloud browsing.



### Voice Control

Sirair's smart WiFi technologies are compatible with your smartphones and AI speakers, such as Google Assistant or Amazon Alexa, enhancing the intelligence of your daily life. You can now enjoy easy voice control for all your air conditioners.

## HEALTH CARE



Multiple Protection,  
Multiple Cleaning

### AC Clean



Self-clean



58° Self-clean



Mildew Proof

### Air Quality



3 in 1 Filter



High Density Filter

# ✓ SELF-CLEAN

Self-clean technology can remove the dust and dirt that lands on the heat exchanger, and improves your indoor air quality.



## TECHNOLOGY

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### Hydrophilic Coated Film

The hydrophilic coating is better suited for dust removal and can also enhance the corrosion resistance of the heat exchanger.



### Cold Expansion Technology

When the self-cleaning mode is activated with a single button press, the evaporator's surface is rapidly cooled, causing frost to form and generate a powerful cold expansion force, which effectively removes dirt. Subsequently, the frost quickly melts and is washed away, leaving the evaporator clean and dry.

## BENEFITS

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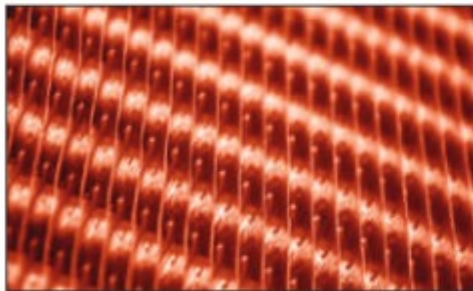
- Self-cleaning technology can effectively remove accumulated dirt from the evaporator, thereby enhancing heat exchange efficiency to ensure that the air conditioner operates in a better cooling condition.
- Save cleaning cost.

# ✓ 58° SELF-CLEAN

58 ° Self-cleaning can maintain the air conditioner in its optimal condition and effectively eliminate bacteria and viruses from the evaporator, ensuring the purity of the air.



## TECHNOLOGY



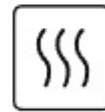
Step 1  
Condensation



Step 2  
Frosting



Step 3  
Defrosting  
and Flushing



Step 4  
58° drying  
and sterilization

## 58 °C High Temperature Sterilization

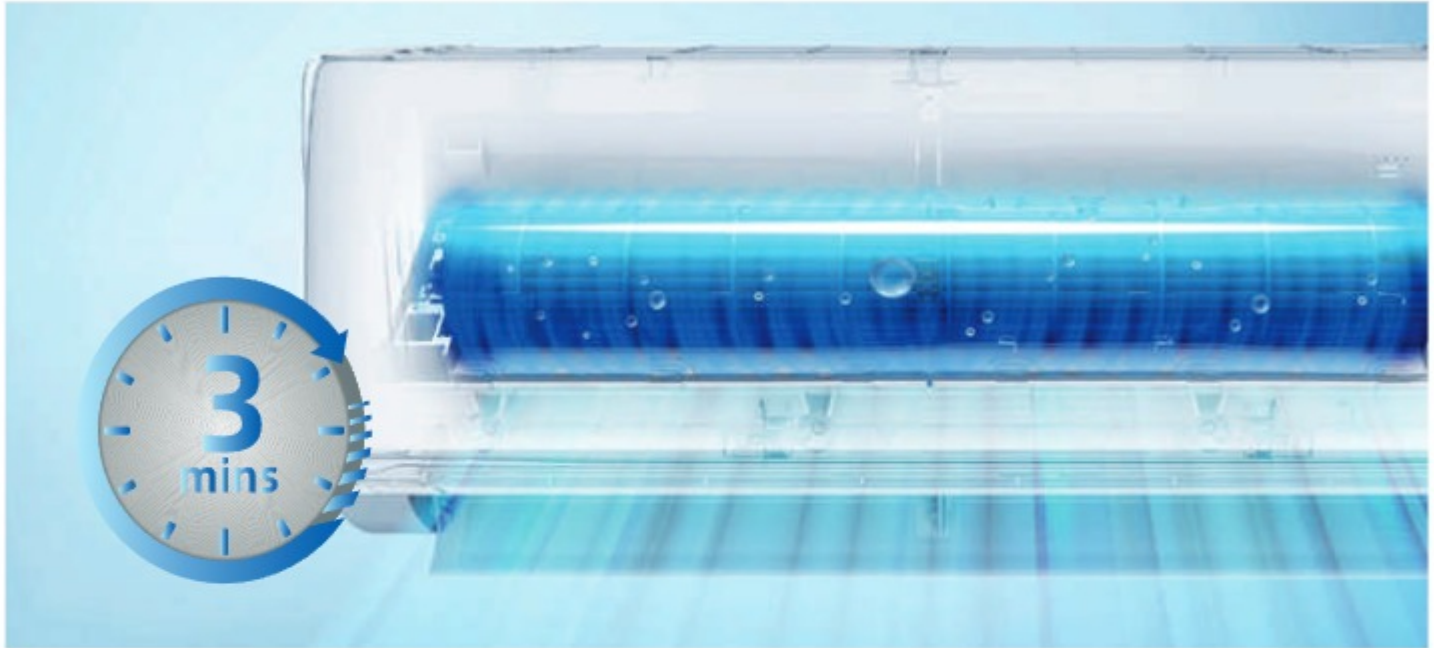
After the evaporator surface condenses, it rapidly cools down, causing frost to form and generating a powerful cold expansion force that removes dirt, defrosts the surface, and washes it. Subsequently, the air conditioner rapidly heats up, with the highest temperature reaching 58 °. The evaporator is then dried, and high-temperature disinfection and sterilization are performed.

## BENEFITS

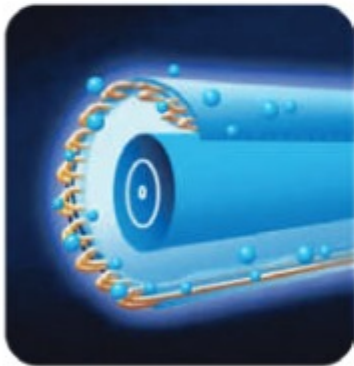
- Eradicate bacteria and viruses by heating the evaporator to a high temperature of 58°C, thus purifying the air.
- Maintain the cleanliness of the evaporator and reduce cleaning expenses.

## ✓ MILDEW PROOF

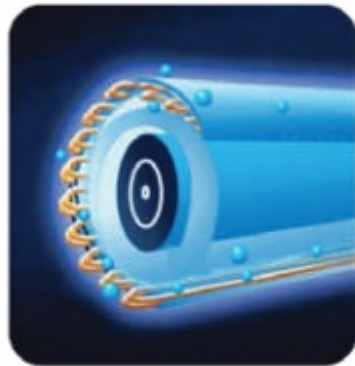
Water may still remain in the unit after turning off the air conditioner. With Sirair's mildew-proof technology, when the air conditioner is turned off, the fan continues to run for 3 minutes to dry the evaporator and prevent mildew in the unit.



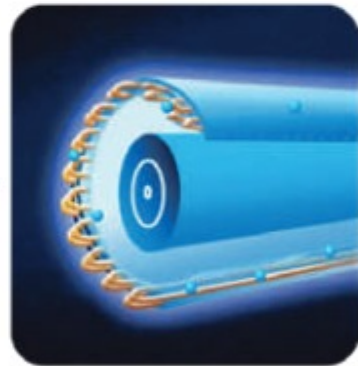
## TECHNOLOGY



**Step 1**  
Water still remain  
after turning off



**Step 2**  
Keep running for 3 minutes



**Step 3**  
water will be dried

## BENEFITS

- Prevent moisture from corroding the interior of the air conditioner and extend the service life of the heat exchanger.
- Effectively prevent the growth of mold and keep the air clean.

# ✓ HEALTH FILTER

Filters are a crucial component of your air conditioner. Not only do filters help clean and purify the air circulating in your home, but they also prevent contamination of the air conditioner.

## Anti Virus Filter

The anti-virus filter has a bacteriostatic rate of over 99% against bacteria and viruses.

## Vitamin C Filter

The filter fills the air with Vitamin C, which improves immunity and promotes healthy skin.

## Active Carbon Filter

Absorbing particles and odors in the air.

## Silver Ion Filter

Silver ion can combine, destroy protein of bacteria and disturb the composing of DNA of bacteria.

## 3 IN 1 Filter & High Density Filter



■ Vitamin C Filter    ■ Silver Ion Filter    ■ Active Carbon Filter

- Air travels through multiple filters and each has the function to provide you with better and healthier air.
- Sirair High Density Filter creates cleaner air with outstanding dust collection due to new improved density of the filter.

## BENEFITS

- Purify the air, reducing air born particles and can lower the number of allergens in your home.
- Protection for your air conditioner to keep it running properly, longer.

**ENERGY SAVING  
& COMFORT  
CARE**



Energy Saving & Comfort



ECO



0.5W Standby



Turbo Mode



Sleep Mode



Quiet Mode

DC Inverter



180° Sine Wave



Fast Cooling



Wide Voltage



# ✓ ENERGY SAVING

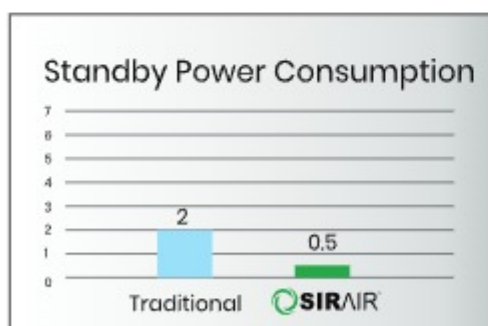


## TECHNOLOGY



### ECO Mode

When the ECO mode is activated, the air conditioner will restrict the power input to conserve energy and enhance the unit's cost-effectiveness. This offers a significant advantage for users seeking a comfortable cooling experience without concerns about operating costs.



### 0.5w Standby

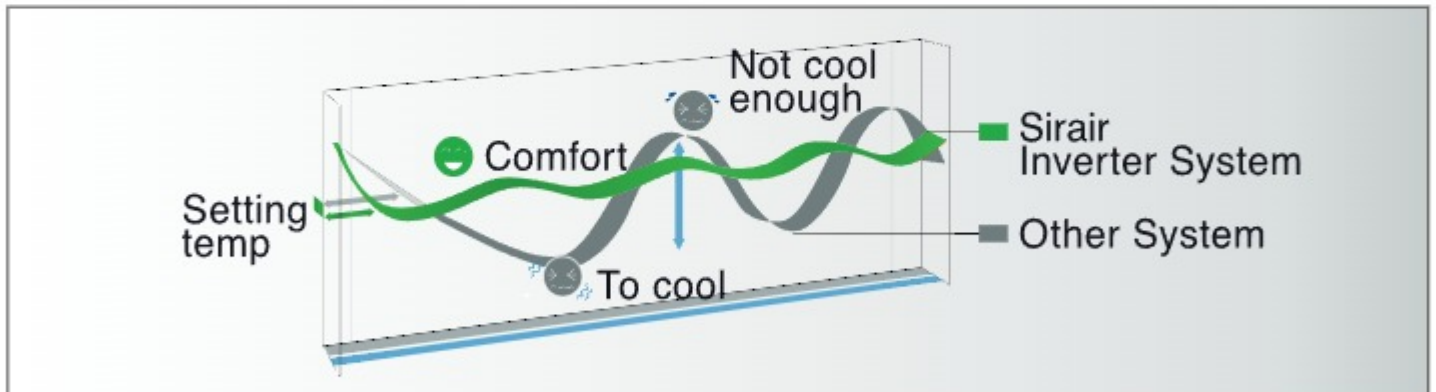
The utilization of digital green power design, an industry-leading standby chip, and an intermittent oscillation mode is employed to minimize AC standby power consumption to 0.5W.

# ✓ DC INVERTER

Sirair's DC inverter technology enhances the accuracy of air conditioner temperature control, resulting in faster cooling and quieter operation.

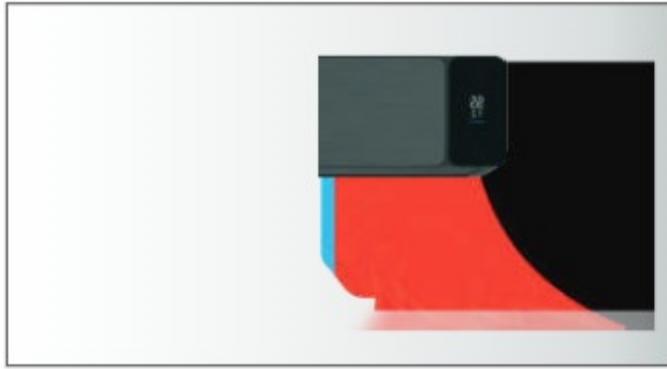


## TECHNOLOGY



## 180° Sine Wave Control

Sirair's DC inverter air conditioner incorporates the benchmark technology of 180° sine wave control technology. When compared to the 120° square wave technology, it offers superior efficiency, lower energy consumption, and enhanced stability and reliability.

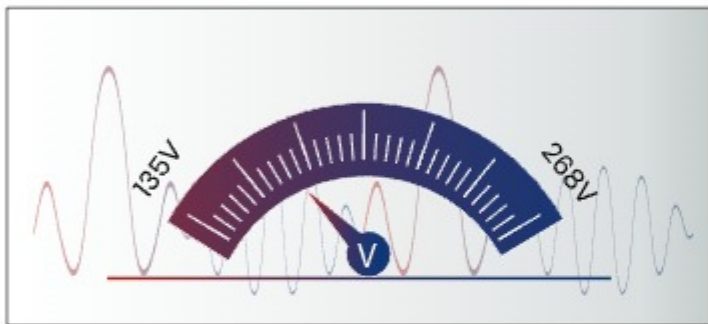


## Fast Cooling & Heating

The Sirair DC inverter air conditioner features a broad frequency conversion range, allowing it to cool at six times the standard speed and heat at nine times the standard speed. Upon activation, it can engage the compressor and turbo in high-frequency operation, achieving the maximum operational speed and quickly reaching the maximum cooling or heating capacity.

## RELIABILITY

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## Wide Voltage Range

The Sirair inverter air conditioner features a wide voltage range of 135v-268v, making it suitable for regions with unstable power supply.

## BENEFITS

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### · User Comfort

The DC Inverter Compressor's speed is continuously adjusted and varied to maintain the desired temperature with minimal fluctuations.

### · Energy Saving

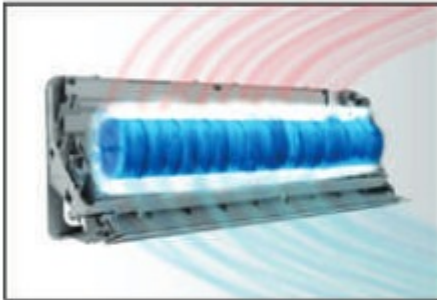
Sirair's DC Inverter Technology minimizes energy loss and maintains high efficiency levels, making it more efficient.

## ✓ COMFORT AIRFLOW



### TECHNOLOGY

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#### Turbo

With this function, the air conditioner will maximize its cooling and heating capacity output, allowing the room to cool down or heat up more rapidly, and achieve the desired temperature in the shortest amount of time



#### Sleep Mode

In sleep mode, the indoor unit decreases the fan speed and turns off the display light to prevent light and noise from disrupting the user's sleep, creating a favorable environment for a restful night's sleep.



#### 3D Airflow

The louvers on the Sirair air conditioner can automatically swing both vertically and horizontally, allowing for a precise and wide-ranging control of the wind direction, which ensures even and widespread cooling.

## Health

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### Mildew Proof

Water may still be present in the unit after the air conditioner is turned off. Thanks to CHANGHONG's mildew-proof technology, when the air conditioner is powered down, the fan continues to run for 3 minutes to dry the evaporator and the fan, effectively preventing mildew growth within the unit.

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### High Density Filter

Sirair's High-Density Filter produces cleaner air with exceptional dust collection capabilities, thanks to its newly improved filter density.

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### Self-clean

When the self-cleaning function is activated with a single button press, the surface of the evaporator rapidly cools, causing frost to form and generating a strong cold expansion force that removes dirt. Subsequently, the frost rapidly melts, is washed away, and the drying process leaves the evaporator clean.

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### 58°C Self-clean

After the evaporator surface condenses, it rapidly cools down and causes frost to form, generating a strong cold expansion force that removes dirt, defrosts the surface, and washes it away. Then, the air conditioner rapidly heats up to a high temperature, with the maximum temperature reaching 58°C. The evaporator is subsequently dried, and high-temperature disinfection and sterilization take place.

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### Cold Plasma

Cold Plasma is a device that simultaneously ionizes the air using positive and negative high-voltage electrodes. This air ionization process results in positively charged ions entering the living space, which then attract hydrogen electrons from mold, viruses, and bacteria present in the air, ultimately causing their demise.

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### Anti Virus Filter

The anti-virus filter has a bacteriostatic rate of over 99% against bacteria and viruses.

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### 3 in 1 Filter

Air travels through multiple filters and each has the function to provide you with better and healthier air.

## DC Inverter

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### 180° Sine Wave

Sirair's inverter air conditioner incorporates the benchmark technology of 180° sine wave control technology. When compared to the 120° square wave technology, it offers better efficiency, reduced energy consumption, and improved stability and reliability.

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### Fast Cooling & Heating

After startup, the compressor engages in high-frequency operation and rapidly attains its maximum cooling (heating) capacity, achieving cooling in just 1 minute and heating in 3 minutes.

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### Wide Voltage Range

The Sirair inverter air conditioner features a wide voltage range of 135V-268V, making it suitable for regions with an unstable power supply.

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## Comfort

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### Turbo Mode

With this function, the air conditioner maximizes the cooling and heating capacity output, enabling the room to cool down or heat up more rapidly and reach the desired temperature in the shortest time possible.

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### Sleep Mode

In sleep mode, the indoor unit lowers the fan speed and deactivates the display light to prevent light and noise from disturbing the user's sleep, thereby creating a desirable environment for a good night's rest.

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## Comfort



### 5 Grades Indoor Fan Speeds

Remote control includes indoor speed options: strong, high, medium, low, and quiet.



### I Feel

With a temperature sensor built into the remote controller, the air conditioner can detect the surrounding temperature of the controller. The I FEEL function allows the air conditioner to operate according to the ambient temperature around the remote controller.



### 3D Airflow

The louvers on the Sirair air conditioner can automatically swing both vertically and horizontally, allowing for precise control of the wind direction, which ensures even and widespread cooling.



### Quiet Mode

In quiet mode, the air conditioner will operate with a super breeze setting to reduce the indoor unit's operating sound.

## Energy Saving



### Brand Compressor

Sirair Air Conditioning selects compressors from world-renowned brands such as GMCC and HIGHLY.



### ECO

When the ECO mode is activated, the air conditioner will restrict the power input to conserve energy and improve the unit's cost-effectiveness. This offers a significant advantage for users seeking a comfortable cooling experience without concerns about the operating cost.



### 0.5W Standby

The digital green power design, industry-leading standby chip, and intermittent oscillation mode are employed to reduce the AC standby power consumption to 0.5W.

## Smart

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### WiFi Control

CHANGHONG smart air conditioners can be controlled or scheduled from your phone no matter where you are. It's also compatible with the Amazon Echo and Google Home smart-home systems, or CHANGHONG TV, allowing you to control your AC by using voice commands, making our life simple and smart.

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### Offline Voice Control

CHANGHONG offline voice control technology, designed to solve users' pain points, completely offline voice analysis, network is not required, providing innovative solutions to make life better.

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## Convenience

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### Auto Restart

When the power is off, the AC unit will restore the previous function setting and will restart automatically when the power is on.

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### Auto Mode

In this mode, the air conditioner automatically adjusts the operating mode and set temperature according to the ambient temperature.

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### Hidden LED Display

CHANGHONG modern large hidden display is perfect for checking your display conveniently. Moreover with Hidden Display feature, avoid light stimulation and take care of your sleep.

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### 24 Hr Timer

The remote control adds a timing button, and the timer can be set arbitrarily in units of 1 hour within 1-24 hours.

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### Emergency Using

An emergency button is added on the main board of the air conditioner, so that the user can use the air conditioner in an emergency when the remote control is damaged or lost.

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### Louver Position Memory

After turning on or changing the mode, the last operating state of the louver position will be automatically memorized, and the louver position will automatically return to the previous state.

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## Convenience



### Independent Dehumidification

Set through the remote control, enter the dehumidification mode to run.



### Dust Removal Reminder

When air conditioner runs for over 800 hours, the indoor unit will display **CL** to remind users to clean the filter. If you do not want to see the "CL" sign, just clean the filter and restart the AC.

## Reliability



### Self-diagnosis and Auto-protection

If the microcomputer in the air conditioner detects abnormal operations or component failures, it will automatically shut off and activate system protection. Additionally, an error or protection code will be displayed on the indoor unit for diagnostic purposes.



### Error Alarm

If the air conditioner encounters any issues while running, an error or protection code will be displayed on the indoor unit.



### Smart Defrosting

During the heating process, the air conditioner intelligently assesses whether the external heat exchanger is frosted and will automatically initiate the defrosting operation based on the temperature changes of the indoor coil or the outdoor coil.



### Heating Compensation

In the heating mode, the ambient temperature sensor is susceptible to the influence of accumulating hot air around the air conditioner, resulting in a detected temperature higher than the actual ambient temperature. The background program includes compensation to align the detected temperature as closely as possible with the true ambient temperature.



### Dew Prevention

In cooling and dehumidification mode, after the air swing operates at the angle conducive to condensation for a period, it will automatically return to the high air volume angle and run for some time to dry any condensation at the air outlet.



### Anti-rust Design

The Sirair outdoor unit is constructed with double-sided galvanized thickened steel plate and is evenly coated with polymer anti-corrosion powder, ensuring long-term rust resistance for the outdoor unit.



### Thoughtful Packaging

The packaging box is designed to ensure that the air conditioner is delivered to consumers without any damage. This is achieved by simulating various road conditions with bumps and conducting high-altitude drop experiments.

# Technical specifications



			Inverter	Inverter	Inverter	Inverter	
			Cooling & Heating	Cooling & Heating	Cooling & Heating	Cooling & Heating	
<b>Model</b>			9K	12K	18K	24K	
<b>Climate type</b>			T1	T1	T1	T1	
<b>Panel</b>			Sigma	Sigma	Sigma	Sigma	
<b>Power supply</b>	Ph-V-Hz		220-240V/50HZ	220-240V/50HZ	220-240V/50HZ	220-240V/50HZ	
<b>Type</b>			Split	Split	Split	Split	
<b>Power Supply Mode</b>			Indoor	Indoor	Indoor	Indoor	
<b>Control type</b>			Remote	Remote	Remote	Remote	
<b>Cooling</b>	<b>Capacity</b>	BTU	9000	12000	18000	24000	
	<b>EER</b>		A	A	A	A	
<b>Heating</b>	<b>Capacity</b>	BTU	9000	12000	18000	24000	
	<b>COP</b>		A++	A++	A++	A++	
<b>Moisture removal</b>		L/h	1	1.2	1.8	2.2	
<b>Max. input consumption</b>		W	1217	1416	2110	2840	
<b>Max. current</b>		A	5.7	6.6	9.9	13.3	
<b>Compressor</b>	<b>Type</b>		Rotary	Rotary	Rotary	Rotary	
	<b>Brand</b>		GMCC	GMCC	SANYO	GMCC	
	<b>Locked rotor Amp(LRA)</b>	A	/	/	/	/	
	<b>Capacitor</b>	uF	/	/	/	/	
<b>Indoor unit</b>	<b>Indoor fan motor</b>	<b>Brand</b>	Welling/Broad-Ocean/Tongde/LT	Welling/Broad-Ocean/Tongde/LT	Welling/Broad-Ocean/Tongde/LT	Broad-ocean/LT	
		<b>Capacitor</b>	uF	1.2	1.2	2	3
		<b>Motor speed (TU/Hi/Mi/Lo)</b>	RPM	1320	1320	1250	1280
	<b>Indoor air flow</b>	m3/h	500/450/400/350	550/500/450/400	820/720/620/520	1150/1080/1000/850	
	<b>Noise level</b>	dB(A)	40/38/36/34	42/40/38/36	44/41/38/35	46/43/40/37	
<b>Unit dimension (W*H*D)</b>	mm	700*198*270	805*270*197	908*295*220	1025*319*223		
<b>Packing (W*H*D)</b>	mm	750*267*317	864*332*265	979*354*292	1102*395*305		
<b>Outdoor unit</b>	<b>Outdoor fan motor</b>	<b>Brand</b>	Welling/Broad-Ocean	Welling/Broad-ocean/Tongde/LT	Welling/Broad-Ocean	Welling/Broad-Ocean/LT	
		<b>Capacitor</b>	uF	2.5	2.5	2.5	2.5
		<b>Motor speed</b>	Rpm	860	860	880	880
	<b>Noise level</b>	dB(A)	50	50	54	54	
	<b>Unit dimension (W*H*D)</b>	mm	660*530*250	660*530*250	780*560*270	780*560*270	
	<b>Packing (W*H*D)</b>	mm	768*575*338	768*575*338	889*612*359	889*612*359	
<b>Refrigerant type</b>		R410A	R410A	R410A	R410A		
<b>Refrigerant charge</b>	Kg	0.61	0.68	1.15	1.35		
<b>Refrigerant pipe</b>	<b>Liquid side</b>		inch	1/4	1/4	1/4	
	<b>Gas side</b>		inch	3/8	3/8	5/8	
	Ambient Working Temperature Range(°C) Cooling-Outdoor			16~52	16~52	16~52	
	Ambient Working Temperature Range(°C) Heating-Outdoor			-15~24	-15~24	-15~24	
	<b>Max. refrigerant pipe length</b>		m	9	12	12	
	<b>Max. difference in level</b>		m	5	7	7	